We Claim:

- 1. A pharmaceutical composition comprising:
- (a) an anticholinergic selected from glycopyrronium bromide or an ester of a bi- or tricyclic amino alcohol of formula (I)

wherein:

Q is one of the groups -CH₂-CH₂-, -CH=CH-, or

R is methyl, ethyl, or propyl optionally substituted by fluorine or hydroxy,

R' is methyl, ethyl, or propyl, and

an equivalent of an anion X counters the positive charge of the N atom; and

Z is one of the groups

$$R^1$$
 or R_1

wherein:

Y is a single bond or an O atom,

R¹ is hydrogen, hydroxy, methoxy, ethoxy, propoxy, methyl, ethyl, propyl, hydroxymethyl, hydroxyethyl, or hydroxypropyl,

R² is a thienyl, phenyl, or cyclohexyl group, wherein these groups are optionally substituted by methyl, and thienyl and phenyl are optionally substituted by fluorine or chlorine, and

R³ is hydrogen, or a thienyl or phenyl group which is optionally substituted by fluorine, chlorine, or methyl; and

- (b) a betamimetic selected from the group consisting of: formoterol; salmeterol; 4-hydroxy-7-[2-{[2-{[3-(2-phenylethoxy)propyl]sulfonyl}ethyl]amino}ethyl]-2(3*H*)-benzothiazolone; 1-(2-fluoro-4-hydroxyphenyl)-2-[4-(1-benzimidazolyl)-2-methyl-2-butylamino]ethanol; 1-[3-(4-methoxybenzylamino)-4-hydroxyphenyl]-2-[4-(1-benzimidazolyl)-2-methyl-2-butylamino]ethanol; 1-[2*H*-5-hydroxy-3-oxo-4*H*-1,4-benzoxazin-8-yl]-2-[3-(4-*N*,*N*-dimethylaminophenyl)-2-methyl-2-propylamino]ethanol; 1-[2*H*-5-hydroxy-3-oxo-4*H*-1,4-benzoxazin-8-yl]-2-[3-(4-*n*-butyloxyphenyl)-2-methyl-2-propylamino]ethanol; and 1-[2*H*-5-hydroxy-3-oxo-4*H*-1,4-benzoxazin-8-yl]-2-[4-[3-(4-methoxyphenyl)-1,2,4-triazol-3-yl]-2-methyl-2-butylamino}ethanol, and a pharmacologically compatible acid addition salt thereof.
- 2. The pharmaceutical composition according to claim 1, wherein the anticholinergic is an ester of a bi- and tricyclic amino alcohol of formula (I)

$$z$$
 O Q $N^{+}R$ $R'_{(I),}$

wherein:

Q is one of the groups -CH₂-CH₂-, -CH=CH-, or

R is methyl or ethyl,

R' is methyl, and

anion X is bromide; and

Z is one of the groups

$$R^1$$
 or Q R_1

wherein:

R¹ is hydrogen, hydroxy, or hydroxymethyl,

 $\ensuremath{R^2}$ is a thienyl, phenyl, or cyclohexyl group, and

R³ is hydrogen, or a thienyl or phenyl group.

- 3. The pharmaceutical composition according to claim 1, wherein the anticholinergic is a salt of tiotropium.
- 4. The pharmaceutical composition according to claim 1, wherein the anticholinergic is tiotropium bromide.

- 5. The pharmaceutical composition according to claim 1, wherein the betamimetic is formoterol or salmeterol, or a pharmacologically compatible acid addition salt thereof
- 6. The pharmaceutical composition according to claim 1, wherein the anticholinergic is tiotropium bromide and the betamimetic is formoterol, or a pharmacologically compatible acid addition salt thereof.
- 7. The pharmaceutical composition according to claim 1, wherein the anticholinergic is tiotropium bromide and the betamimetic is salmeterol, or a pharmacologically compatible acid addition salt thereof.
- 8. The pharmaceutical composition according to claim 1, wherein the anion X is selected from the group consisting of: chloride, bromide, and methanesulfonate,
- 9. The pharmaceutical composition according to one of claims 1 to 8, wherein the pharmaceutical composition is an inhaled pharmaceutical composition.
- 10. A process for the production of a pharmaceutical composition according to one of claims 1 to 8, comprising:
 - (a) mixing the anticholinergic and the betamimetic; and optionally
 - (b) adding an adjuvant and/or carrier materials.
- 11. A method of treating respiratory ailments by administering to a host in need of such treatment a pharmaceutical composition according to one of claims 1 to 9.
- 12. The method according to claim 11, wherein the respiratory ailment is asthma or COPD.
- 13. A method of treating respiratory ailments by administering to a host in need of such treatment a pharmaceutical composition according to claim 9.

14. The method according to claim 13, wherein the respiratory ailment is asthma or COPD.